

Calendar

Thursday, April 23
11 a.m.

[Computing Techniques Seminar](#) - FCC1

Speaker: Charlie Catlett,
Argonne National Laboratory
Title: Re-thinking Information
Technologies and Services at
National Laboratories
THERE WILL BE NO
PHYSICS AND DETECTOR
SEMINAR THIS WEEK
2:30 p.m.

[Theoretical Physics Seminar](#) -
Curia II

Speaker: Gustavo Burdman,
Fermilab/University of Sao
Paulo

Title: Electroweak Symmetry
Breaking and a Strongly
Coupled Fourth Generation
3:30 p.m.

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.

[Accelerator Physics and
Technology Seminar](#) - One
West

Speaker: Mauricio Lopes,
Fermilab
Title: Helical Solenoids for
Helical Cooling Channels

Friday, April 24
3:30 p.m.

DIRECTOR'S COFFEE
BREAK (NOTE TIME) - 2nd Flr
X-Over
4 p.m.

[Joint Experimental-Theoretical
Physics Seminar](#) - One West

Speaker: Sergey Burdin,
University of Liverpool/
Lancaster University
Title: Probing the Origin of
Matter/Antimatter Asymmetry
at DZero with 5 inverse
femtobarns

[Click here](#) for NALCAL,
a weekly calendar with
links to additional
information.

Profile

Federwitz keeps employees on task and laughing



Jody Federwitz, of PPD's Mechanical Engineering Department, is a 22-year Fermilab veteran.

What people in the Particle Physics Division Mechanical Engineering Department love the most about Jody Federwitz is her sense of humor.

"Jody is always professional, with an eye for details and ways to make improvements, someone you can count on to start and finish a project," said Elaine Phillips, of PPD's Support Services Department. Yet she still brings joy to the work day at Fermilab, Phillips added.

When Federwitz, an administrative assistant, arrived at the laboratory in 1987 people had just started using computers on a daily basis. Her job has included training PPD employees using the laboratory's Procard database and warning co-workers about rogue geese.

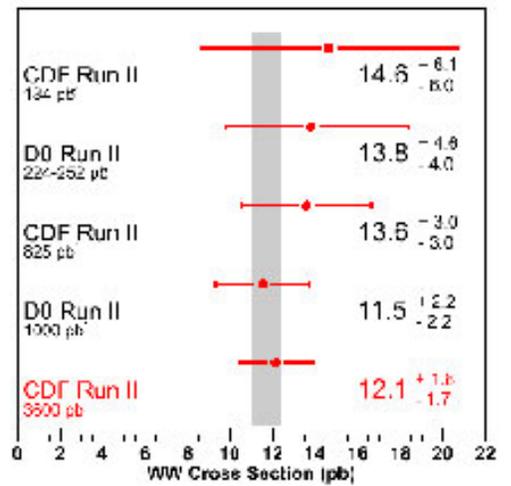
Federwitz always had a goal to work at Fermilab. She and her husband, Glenn, who works for ES&H in AD, moved to Batavia from Wisconsin when he was hired by the laboratory in 1977. She waited until their two daughters were in school before applying to Fermilab.

Over the years Federwitz has worked in the areas of safety, cryogenics, electrical and mechanical engineering as well as with the U. S. Particle Accelerator School based at Fermilab. Federwitz said her 22 years feels like only about five. Federwitz sees how physics can affect people's everyday lives.

"The research done here has given us medical imaging, cancer therapy, supercomputing and

Fermilab Result of the Week

CDF reaps double reward with double W measurement



The recent CDF result, shown in red, is the most precise ever of the WW production cross section. CDF reaps double the reward since the measurement also helps to precisely constrain the backgrounds of searches for a Higgs boson decaying to two W bosons.

Two is better than one... at least for CDF scientists. They took a break from their search for the Higgs boson to study what they consider a background -- the production of two W bosons that didn't come from the decay of a Higgs boson. In the process, they made the world's best measurement of how often these double Ws are produced in proton-antiproton collisions.

The W boson is one of two subatomic particles that mediate the weak force. The other particle is the Z boson. Double W production is an important Standard Model process to understand. But the WW final state is also interesting because of which particles might decay into it. A Higgs boson, in particular, might help explain how particles gain mass and it would decay primarily into two W bosons. To find the signature of a Higgs boson to WW decay, scientists must first know very precisely how often double Ws are produced directly from other processes. That's the goal of this measurement.

By selecting from the same data and applying the same advanced analysis tools used for the Higgs search, CDF scientists searched for WW events where each W decays to a lepton (electron or a muon) and a neutrino. CDF

Weather

 Sunny
65°/40°

[Extended Forecast](#)
[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

Thursday, April 23
- Southwestern chicken tortilla
- Philly style cheese steak
- *Garlic herb roasted pork
- Smart cuisine: Mardi Gras jambalaya
- *Southwestern turkey wrap
- Assorted slice pizza
- *Marinated grilled chicken Caesar salads

*Carb restricted alternative

[Wilson Hall Cafe menu](#)

Chez Leon

Thursday, April 23

Dinner
- Spinach & bacon salad
- Grilled swordfish w/ lime cilantro
- Sauce
- Rice pilaf
- Lemon cake

Wednesday, April 29

Lunch
- Asian marinated flank steak
- Jasmine rice
- Peapods & water chestnuts
- Orange flan

[Chez Leon menu](#)

Call x3524 to make your reservation.

Archives

there's a lot more yet to be discovered," she said.

She has been a member of the Auditorium Committee since 2000. Her fondest memory is working the open house in 1997 because she was able to show the laboratory's neighbors around. She said it was hard work but rewarding.

"When I retire I hope people will say that I made them laugh," Federwitz said. "But I'll also have made sure they got their paperwork in on time."

-- Tia Jones

In Brief

Keep your finger on the *Pulse* of DOE science

Pulse, a bi-weekly Department of Energy newsletter, has just gotten a facelift. The redesigned publication still offers science news from across the DOE's national laboratories, but has a fresh presentation and more up-to-date content.

Pulse includes research highlights, features and profiles of individual researchers. Check out the latest news [here](#).

To receive an e-mail notification every two weeks, [sign up](#) for you free subscription.

Special Announcement

Plant a tree April 30 in honor of Earth and Arbor Days

Celebrate Earth Day and Arbor Day by planting a tree on Thursday, April 30. Join Fermilab Natural Areas and Roads and Grounds in their annual tree planting at 11:30 a. [Plant a tree on April 30.](#) m. near the West

Wilson Street guard house. There are 84 trees and shrubs available for planting. A hot dog lunch will be available after the event for participants. [Learn more](#)



scientists separated the true WW events from backgrounds using the measured information from the leptons and the missing energy, caused by neutrinos which escape the detector without interacting. Their measurement of WW production agrees well with theoretical predictions.

With this new, more precise measurement of WW production, CDF scientists demonstrate that they understand and can predict well the largest background for searches for a Higgs decaying to two W bosons. This result also validates that the advanced analysis tools used in the Higgs search work well when CDF scientists apply them to a known process. Next step: find the Higgs.

[Learn more](#)

--edited by Craig Group



The following physicists are members of the Higgs to WW search analysis [group] and contributed to this analysis: Top row insets from left to right: Matt Herndon, University of Wisconsin-Madison; Eric James, Fermilab; Donatella Lucchesi and Simone Pagan Griso, INFN and University of Padova; Aidan Robson, University of Glasgow; Mark Kruse, Duke University. Bottom row from left to right: Britney Rutherford, Fermilab; Dean Hidas, Rutgers University; Roman Lysak, IEP SAS, Slovakia; Sergo Jindariani, Fermilab; Jennifer Pursley, University of Wisconsin-Madison; Rick St. Denis and Peter Bussey, University of Glasgow; Doug Benjamin, Duke University.

Accelerator Update

April 20-22
- Four stores provided ~40.25 hours of luminosity
- MI LCW tripped off
- Pbar controls crate power supply replaced

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

In the News

[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)[Info](#)[Fermilab Today](#)

is online at:

www.fnal.gov/today/

Send comments and suggestions to:

today@fnal.gov

Fermilab physicist George Gollin wins Guggenheim Fellowship

[George Gollin](#)

received 2009

Guggenheim Fellowships.

From *University of Illinois at Urbana-Champaign News bureau*, April 8, 2009

CHAMPAIGN, Ill. — Two University of Illinois physics professors, George Gollin and Laura Greene, and visiting scholar Jabari Asim have

They were among 180 artists, scholars and scientists to be selected in the John Simon Guggenheim Memorial Foundation's 85th annual competition. Winners are chosen on the basis of their "stellar achievement and exceptional promise for continued accomplishment," the foundation said in its April 8 awards announcement.

[Read more](#)

In the News

The five greatest mysteries of antimatter

From *New Scientist*, April 22, 2009

It was not so long ago that we were hearing how CERN's Large Hadron Collider would produce planet-destroying black holes. Now Dan Brown's blockbuster, due to hit the big screen next month, provides us with another supposed danger emanating from the particle physics laboratory near Geneva, Switzerland: antimatter, the seed of a weapon of unsurpassed destructive power.

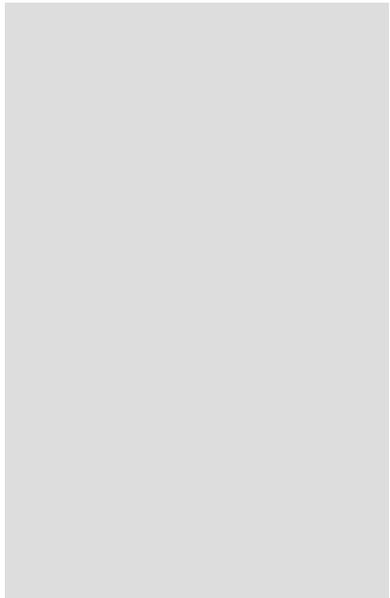
While Brown's take on antimatter is fictional, the stuff certainly isn't. We see its signature in cosmic rays, and it is routinely made in high-energy collisions inside particle smashers the world over. In hospitals, radioactive molecules that emit antimatter particles are used for imaging in the technique known as positron emission tomography.

Brown was right about one thing, though: if you want answers to the burning questions of antimatter, CERN is the place to go.

[Read more](#)

Announcements

[Have a safe day!](#)[Word 2007: Styles and Templates class today](#)[April is National Humor Month...click on the link for the joke of the day](#)[Free 30-minute ab workout](#)[Fermilab club & league fair](#)[Blackberry Oaks Golf League](#)[Got golf? Join the Fermilab Golf League](#)[Muscle toning classes](#)[Argentine Tango classes through May 13](#)[Discounted rates at Grand Geneva Resort, Lake Geneva, WI](#)[MathWorks seminar today](#)[NALWO - Mexican cuisine cooking demonstration](#)[Lederman Science Center to host outdoor fair - April 26](#)[Greek Folk Dance workshop - April 30](#)[NALWO Spring tea May 1](#)[English country dancing May 3](#)[Word 2007: New Features class May 5](#)[Excel 2007: New Features class May 7](#)[National Day of Prayer observance May 7](#)[Best of Dance Chicago - Fermilab Arts Series - May 9](#)[Rapid Hardware Prototyping and Industrial Control Application Development seminar May 13](#)[Co-ed softball season begins May 13](#)



[Summer co-ed volleyball league begins June 1](#)

[Conflict Management and Negotiation Skills class June 3 and 10](#)

[Discount tickets to "1964"...Beatles tribute - June 6](#)

[SciTech summer camps](#)

[Additional Activities](#)

[Submit an announcement](#)